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ABSTRACT

This is the thirty-first in a set of 36 teacher guides to the Entrepreneurial Training modules and accompanies CE 031 090. The purpose of the module is to give students some idea of what it is like to own and operate an auto repair shop. Following an overview are general notes on use of the module. Suggested steps for module use contain suggestions on introducing the module, a brief discussion of the nine units, responses to learning activities, suggestions for summarizing the module, and responses to the quiz. The units are Planning an Auto Repair Shop; Choosing a Location; Getting Money to Start; Being in Charge; Organizing the Work; Setting Prices; Advertising and Selling; Keeping Financial Records; Keeping Your Business Successful. Each unit contains a case study; responses to individual activities; responses to discussion questions; and a group activity. Suggested readings for the teacher and a list of goals and objectives complete the module. (CT)

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Entrepreneurship Training Components

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ED211807

GETTING DOWN TO BUSINESS:

Auto Repair Shop

Module 31

Teacher Guide

CE031091

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GETTING DOWN TO BUSINESS:

Auto Repair Shop

Carolyn McFarlane

May 1981

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OVERVIEW

The purpose of these Getting Down to Business modules is to provide high school students in vocational classes with an introduction to the career option of small business ownership and to the management skills necessary for successful operation of a small business. Developed under contract to the Office of Vocational and Adult Education, U.S. Department of Education, the materials are designed to acquaint a variety of vocational students with entrepreneurship opportunities and to help reduce the high failure rate of small businesses.

As the students become familiar with the rewards and demands of small business ownership, they will be able to make more informed decisions regarding their own interest in this career possibility. It is hoped that, as a result of using these materials, some students will enter small business ownership more prepared for its challenges. Others will decide that entrepreneurship is not well suited to their abilities and interests, and they will pursue other career paths. Both decisions are valid. The materials will encourage students to choose what is best for them.

These Getting Down to Business modules are designed to be inserted into ongoing high school vocational programs in the seven vocational disciplines--Agriculture, Distributive Education, Occupational Home Economics, Business and Office, Trades and Industry, Technical, and Health. They will serve as a brief supplement to the technical instruction of vocational courses, which prepare students well for being competent employees but which generally do not equip them with skills related to small business ownership. The modules are self-contained and require a minimum of outside training and preparation on the part of instructors. Needed outside resources include only those types of materials available to all students, such as telephone directories, newspapers, and city maps. No special texts or reference materials are required. For further optional reading by instructors, additional references are listed at the end of the Teacher Guide. An annotated Resource Guide describing especially valuable entrepreneurship-related materials is also available.

The purpose of this module is to give students some idea of what it is like to own and operate an auto repair shop. Students will have an opportunity to make the same decisions that the owner of an auto repair shop makes. While the module is not a complete "how-to" manual, the individual activities will provide your class with the chance to do many of the planning and daily activities that small business owners do.

Today, owners of small businesses face a multitude of problems--some minor, some that threaten their very existence. These problems reflect the constant changes that our society is going through--economic, cultural, and technical. While this module cannot address itself to all of them, the discussion questions at the end of each unit are designed to give your class the opportunity to discuss them and develop, on a hypothetical basis, solutions for themselves.

You may want to present this module after completing Module 1, Getting Down to Business: What's It all About? Module 1 is a 16-hour program covering a more in-depth approach to owning any small business. The terms introduced in Module 1 are used in this module with a restatement of their definitions. Also, the forms used are the same, with some minor changes to fit an auto repair shop specifically. Module 1 provides an introduction to owning a small business in addition to some skills and activities that, due to their general nature, are not covered in this module.

Content Organization

Each unit of the module contains the following:

1. Divider Page--a page listing the unit's goal and objectives.

2. Case Study--an account of an auto repair shop owner for a more intimate view of owning an auto repair shop..

3. Text--three to four pages outlining business management principles introduced in the case study.

4. Learning Activities--three separate sections, including:

   a. Individual Activities--finding information given in the text or applying information in the text to new situations.

   b. Discussion Questions--considering broad issues introduced in the text; several different points of view may be justifiable.

   c. Group Activity--taking part in a more creative and action-oriented activity; some activities may focus on values clarification.

General Notes on Use of the Module

Instructional Time:	Each unit = 1 class period; total class periods	= 9
	Introduction, quiz, summary	= 1
	Total instructional time = 10 class periods	

The case study and text are central to the program's content and are based on the instructional objectives appearing in the last section of this Guide. Learning activities are also linked to these objectives. You will probably not have time, however, to introduce all the learning activities in each unit. Instead, you will want to select those that appear most related to course objectives, are most interesting to and appropriate for your students, and are best suited to your particular classroom setting. Certain learning activities may require extra classroom time and may be used as supplementary activities if desired.

Before presenting the module to the class, you should review both the Student and Teacher Guides and formulate your own personal instructional approach. Depending on the nature of your classroom setting and the students' abilities, you may want to present the case study and text by instructional means that do not rely on students' reading--for example, through a lecture/question-answer format. Case studies and certain learning activities may be presented as skits or role-playing situations.

No particular section of the module is designated as homework, but you may wish to assign certain portions of the module to be completed out of class. You may want students to read the case study and text in preparation for discussion in the next class period, or you may want them to review the material at home after the class discussion. You may also prefer that students read the material in class. Similarly, individual activities may be completed in class or for homework. Discussion questions and group activities are specially intended for classroom use, although some outside preparation by students may also be needed (for example, in the case of visiting a small business and interviewing the owner).

Methods that enhance student interest in the material and that emphasize student participation should be used as much as possible. Do not seek to cover material exhaustively, but view the course as a brief introduction to entrepreneurship skills. Assume that students will obtain more job training and business experience before launching an entrepreneurial career.

The quiz may be used as a formal evaluation of student learning or as a self-assessment tool for students. Answers to learning activities and the quiz are provided in a later section of this guide.

SUGGESTED STEPS FOR MODULE USE

Introduction (15 minutes or integrate within the first hour of Unit 1)

I. In introducing this module, you might want to discuss the differences between the tasks of an auto mechanic and the owner of an auto repair shop.

Questions to ask include the following.

- What are the tasks of an auto mechanic?
- What are the tasks of an auto repair shop owner?
- How do these tasks differ?
- Would all people who are good auto mechanics make good business owners?
- What different kinds of repair businesses can an auto mechanic start?
- What are some new types of auto repair businesses that have appeared recently?

II. Discuss small businesses briefly. Over 90% of all businesses in the United States are small businesses. In this module we will be dealing with very small businesses, meaning a self-employed owner working alone or with one to four employees. Often small businesses are owned and run by members of a family.

Additional points to cover in your introduction of the module include:

- The personal qualities needed in a small business owner. Help students decide whether this career option is attractive to them and how to develop needed personal qualities.
- The high rate of small business failure. Emphasize the need for strong business management skills to succeed (hence, the need for these modules)
- The large market for auto repair services. Indicate to students that there is a lot of competition, however, and start-up costs are fairly high. Encourage students with auto mechanics training to familiarize themselves with this career option and to consider it for themselves.

III. Discuss the purposes of the module:

- To increase students awareness of small business ownership as a career option
- To acquaint students with the skills and personal qualities owners of an auto repair shop need to succeed
- To acquaint students with the kind of work small business owners do in addition to using their vocational skills
- To expose students to the advantages and disadvantages of small business ownership.

IV. Emphasize that even if students think they lack management aptitudes, some abilities can be developed. If students "turn on" to the idea of small business ownership, they can work at acquiring abilities they don't have.

Also, students who work through this module will have gained valuable insights into how and why business decisions are made. Even if they later choose careers as employees, they will be better equipped to help the business succeed because of their understanding.

Unit 1 - Planning an Auto Repair Shop (1 class period)

I. Case Study: Matthew Zarcone, an experienced mechanic, decides to start his own auto repair shop. He begins to do his own repair work at night, while continuing to be employed as a mechanic during the day. After studying the competition and thinking about customers' needs, he decides to start a quick tuneup/oil/lube shop that also does brakework. He chooses a name, gets his business permits, and finds an accountant.

Text: Personal Qualities You'll Need
Trends
Services
Customers
Competition
Special Ways to Compete
Permits

II. Responses to Individual Activities

1. All these qualities are important for the owner of a car repair shop. Students may work at acquiring the qualities they don't have. If they are weak in most or all areas, however, this kind of business is probably not something they'd be good at or enjoy.

2. Responses depend on the community studied. Students should list (a) several shops that specialize in certain services, (b) several shops that specialize in certain cars, and (c) extra services offered.

3. The response depends on the community studied.

4. Students should describe local business licenses, building and zoning permits, and state permits required.

III. Responses to Discussion Questions

1. Matt did a good job of planning his business. He studied the competition and found a need he could fill--short, quick repair services--caused by the closing of several gas station repair shops. He also thought he could please customers by doing the work quickly and by not requiring appointments. Matt's new business image--good service that is quick and inexpensive--fits in with the trend today for convenience. (Matt has a similar business image as that of a fast-food restaurant.) This will probably help make his business successful.

2. Other trends include increased cost and complexity of equipment, increased consumer awareness, increased government regulation, growth of auto franchise businesses, increased computerization, the do-it-yourself trend, and the growth of service businesses. Car repair shop and related services will probably continue to be popular in the U.S. However, the types of auto businesses that will be most successful are the ones that are responsive to these trends. Imaginative business examples include a business which helps people "diagnose" and select used cars and a "do it yourself" auto repair shop, where tools and space are rented to individuals wanting to repair their own cars.

   Some of the trends described above may be contradictory. In such cases, a business owner should concentrate on pursuing one certain trend and aiming his or her business at the appropriate group of customers.

3. Training, experience and resources should include:
   - general work experience;
   - training or experience in car repair;
   - training or experience in business management (including recordkeeping);
   - money to invest in the business;
   - a family that supports the business idea; and
   - friends or relatives who can give business advice.

IV. Group Activity

This activity is designed to acquaint students with a real-life auto repair shop owner. The principles in the text should be reinforced by the students' personal contact with such a person.

A suggested list of questions for the visitor is provided. The questions as listed cover all of Units 1, 2, and 3 of this module. Therefore, this activity could be used after Unit 3 rather than after Unit 1 if desired. In fact, this activity could be used at the very end of the module or at any time when scheduling might be more appropriate. It will probably require extra classroom time. An open-ended discussion period should be provided at the end of the interview.

Unit 2 - Choosing a Location (1 class period)

I. Case Study: Matt looks for a location for his quick tune shop. He wants a place that is far from his main competition, that is on a busy street, and that is suited for car repair work. He also wants a place that is for rent at a reasonable rate. Matt hears that the gas station of a friend is dropping its car repair department. The condition and location of the building are just what he wants and the rent is reasonable. Matt decides to take it.

Text: Picking an Area
Picking a Building

II. Responses to Individual Activities

1. c
   d
   b

   Location "a" is a questionable choice for any car repair shop. Several car repair businesses have been located there before. Such a high turnover suggests (but does not prove) a problem with the location.

2. Possible answers include:
   - work space (to do car repairs);
   - storage space;
   - office space;
   - drive-in and parking space; and
   - space for customers to wait in.

3. Students' responses will vary depending on your community. Students' choice of streets should be based on their distance from main competition and closeness and convenience to customers.

III. Responses to Discussion Questions

1. Matt picked the one location that seemed most likely to be successful. He based his choice on the nearness of each location to his customers and competition, its centrality to passing traffic, and the price.

   He also could have collected information from possible customers, realtors, business owners nearby, the local Chamber of Commerce, and the city planning department.

2. Responses depend on the community studied. If there are numerous tuneup shops or few possible customers, the town is probably a poor location.

3. A convenient location is more important for a quick-service car repair shop than for a general or specialty repair shop. A convenient location is good for attracting customers who may think of their minor car repair needs as they drive down the street. If major car repairs are needed, however, the customers usually plan ahead and are willing to drive a little further (and perhaps make an appointment) to get good service. In this case, a convenient location is not as important. The customer should be able, of course, to find the shop without getting lost and without using too much gas.

IV. Group Activity

The purpose of this activity is to provide students with an opportunity to analyze present and possible car repair shop locations in an area for appropriateness. Students should defend their choice of location based on location of customers and competition, the recommendations of the realtor, and the characteristics and costs of each building.

Unit 3 - Getting Money to Start (1 class period)

I. Case Study: Matt figures out how much money he has and how much he'll need to start his shop. He lists the equipment, furniture, parts, supplies, and renovations he'll need. He adds in other start-up expenses plus his operating expenses for the first six months. Then he writes a business description and fills out a statement of financial need and applies for a business loan from the bank.

Text: Business Description
Statement of Financial Need

II. Responses to Individual Activities

1. S P
   E P
   P E
   E S
   E E
   S

2. Students' business descriptions should contain information about the six topics mentioned in the text. Students may add further details about Matt's business on these (and other) topics not mentioned in the case study if desired. The business description should convince the bank that Matt did a good job of research and planning and that his business is likely to do well.

3. A resume is a short account of one's job experience, training, and other abilities. It is usually prepared by someone who is applying for a job or a business loan.

   A resume should contain the following information: name, address, phone number of individual; career goals; current employer, job title, and responsibilities; past job information; educational history; other abilities, hobbies, and interests; and names of people who are familiar with the applicant's work and character.

4.

STATEMENT OF FINANCIAL NEED

Expenses (first 6 mos.)		Money on Hand	
Start-up Expenses		Owner's Cash on Hand	$10,000
Rental Deposit	$ 600		
Utilities Deposit	150	Investment by	
Repairs and Renovations	2,000	Relative	10,000
Equipment and Furniture	10,000		
Auto Parts & Supplies	4,000	TOTAL MONEY ON HAND	20,000
Office Supplies	510		
Advertising	1,000		
Other	1,000		
TOTAL START-UP EXPENSES	$20,760		
		TOTAL EXPENSES	$38,850
Operating Expenses and Costs (first 6 months)		TOTAL MONEY ON HAND	$20,000
Salary for part-time mechanic (700 x 3)	$ 2,100	TOTAL BUSINESS LOAN NEEDED	$18,850
Payroll Taxes (70 x 3)	210		
Rent (600 x 6)	3,600		
Utilities (150 x 6)	900		
Equipment (50 x 6)	300		
Auto Parts & Supplies (800 x 6)	4,800		
Office Supplies (30 x 6)	180		
Advertising (800 x 6)	4,800		
Other (200 x 6)	1,200		
TOTAL OPERATING EXPENSES AND COSTS	$18,090		
TOTAL EXPENSES (6 mos.)	$38,850		

III. Responses to Discussion Questions

1a. To break even in a certain month of business, your revenues for that month must equal your operating expenses. When you start your business, your operating expenses will be at a certain level whether you make any sales or not (perhaps a thousand dollars or more). For example, you'll have to pay the same amount of rent and insurance whether you have lots of customers or not. It takes a while for you to build up customers in your business. It may take six months to a year to get enough customers so your revenues will be as high as your expenses. In the meantime, you'll need money from other sources to pay your operating expenses. If you provide good service and keep up your advertising, your business will probably continue to grow. With luck (and skill), in the months after your break-even point your revenues will continue to rise above your expenses.

b. Matt would have to sell $2700 in parts and services to cover his operating expenses for a month. He figured it would take him quite awhile to get enough customers to bring in that amount. In the meantime, he planned to pay his business expenses with his money on hand and the money he borrowed from the bank. When his revenues were higher, later, he'd pay all his expenses from his revenues (and he'd begin to take a salary for himself).

2. Matt's business would probably cost less to start than most other kinds of car repair shops. Because he only offers three services, he doesn't need as much equipment or as many parts and supplies as a general repair shop, for example. However, it is still possible to start most kinds of car repair businesses without much money. You can do it by:
   - offering high quality service;
   - charging high prices or attracting a large number of customers;
   - operating your business at home or in a small, out-of-the-way shop;
   - buying used equipment;
   - keeping your parts inventory low (and running to the store when you need something);
   - buying equipment, parts, and supplies on credit;
   - sending some of your repair work out to other shops that have special equipment (such as a brake lathe); and
   - living on a low income.

However, the more money you have to start, the more smoothly your business will run and the fewer ulcers you'll get!

3a. Disapprove loan. She has mechanical experience and has done research for a good business description. However, she has no training in business or management and does not have enough money.

b. Approve loan. He has some knowledge of mechanics and has business management experience. He has a good business description and enough money.

c. Disapprove loan. He has mechanical and management experience. His planning is poor, however (no written business description, poor business location). The written materials he brings to the bank do not give enough information about him, his finances, or his planned revenues and expenses.

IV. Group Activity

The purpose of this activity is to allow students an opportunity to (1) collect realistic information about the money needed to start a car repair shop and (2) complete an original

statement of financial need. Students may also acquire further personal contact with real-life repair shop owners.

The format of the students' statements of financial need should resemble the one in the text. Figures should be ballpark estimates only. Costs of equipment, parts, and shop supplies should be itemized on a separate page.

Unit 4 - Being in Charge (1 class period)

I. Case Study: Matt decides to hire a part-time mechanic for his shop who will eventually become full-time. He writes a job description, puts an ad in the paper, and hires the best applicant--an experienced mechanic named Meg Bishop. Matt and Meg divide the work and also have complementary interests and abilities.

Text: Dividing the Work
Hiring Workers
Training Workers
Keeping Your Workers Happy

II. Responses to Individual Activities

1.
- doing mechanical work;
- buying and keeping track of parts and supplies;
- dealing with customers and supervising workers;
- doing paperwork;
- hiring, training, and firing workers; and
- advertising, pricing, and doing long-range planning and decision making.

2. Students' responses will depend on the ads collected. Ads will contain the following information:
- title of job and tasks to be performed;
- experience and training needed;
- hours, wages, and benefits offered;
- name, address, and phone number of employer; and
- instructions on how to apply for the job.

Students should select favorite ads based on whether they have enough information, are written in an interesting manner, and have an attractive format.

3. A possible response might be:

Job Title: General Auto Mechanic

Tasks:
- To repair cars in a quick-tune and brake shop;
- To take primary responsibility for complete brake jobs;
- To do tuneups, oil changes, and lubes when needed;

- To attend classes on car repair on owner's request;
- To clean shop and equipment when needed;
- To study and follow safety rules; and
- To assist in the ordering and checking in of auto parts and supplies.

Relationship of Job to Other Jobs: This employee will report to the owner of the company, who is also the head mechanic. He or she will assist the owner with minor repair work and other tasks as needed. This employee will also run the shop when the owner is absent.

4. Students' want ads should contain the kind of information listed in Individual Activity #2. They should summarize briefly the job description developed in Individual Activity #3. Ads should attract attention, and be interesting and informative. They should also be concise and well laid out.

5. Person "b" is probably the best response. This person would do well as the third mechanic since he has a specialty that would fit in well with the others.

   The owner would probably want to give up his job as mechanic or parts person and remain in his job as service manager. In this way, he could get the technical work done, and retain control of operations. The foreign car mechanic service manager (a) may not be satisfied giving up his supervising tasks and working as a general mechanic. The parts person's (c) knowledge may be somewhat out of date, since parts change yearly. The new graduate (d) may need additional practical training that the owner doesn't seem to have time to give.

III. Responses to Discussion Questions

1. Meg was a good choice for the job. She had at least two years' experience, good references, and was willing to do the assigned work, part-time. She also was interested in improving her skills. She was good with customers and was willing to take over when Matt was out of the shop. Also she and Matt got along well. Their interests complemented one another. Matt was getting to prefer customer contact and management, and Meg preferred car repair. She was, however, flexible, and could do other things if she had to.

2. It would be rather difficult to do car repair half-time and customer relations/business management half-time. The two kinds of jobs require different skills. Mechanics have to be able to concentrate on one thing and must be good with their hands. They may prefer to work alone, without lots of people contact. Business owners have to be able to handle lots of things at once and should like to work with people (and to handle "people problems"). The two kinds of work require certain distinct abilities and qualities. It is possible for

one person to have them all, but many people find it difficult to "change hats" back and forth during the day.

3. Either person could succeed as a car repair shop owner/manager by hiring someone who had the skills that he or she lacked. It would be somewhat easier for a business person to hire a mechanic, however, than for a mechanic to hire a business manager. In the second case, the owner/mechanic would be in the potentially awkward position of having an employee as "boss." Therefore, students in vocational auto repair programs should realize the importance of having good business skills if they want to start their own repair shop, especially one with more than one or two employees.

4. Possible responses may include:
   - having too much to do yourself (Tasks like recordkeeping, business planning, clean-up, reorganization of tools and supplies, and redecoration often take up an "infinite" amount of time. Many business owners find themselves working 50-70 hours a week!);
   - having workers that don't get along with one another, with customers, or with you;
   - having workers who are always sick, tardy, or absent for "no good reason;"
   - Having workers who do poor repair work because they work too quickly, don't check their work, etc.; and
   - Having dishonest workers who "fudge" on their time cards or "borrow" money from the cash box.

IV. Group Activity

The purpose of this activity is to help students decide how to divide the work of a car repair service, make preparations to hire a new employee, and make the actual hiring decision.

In dividing the labor, students should group tasks requiring similar skills and experience. The want ad should contain the information described in Individual Activity #2 and be informative, simple, and "catchy." Students should be able to defend their choice of the best job applicant based on his or her training, experience, and personal qualities.

Unit 5 - Organizing the Work (1 class period)

I. Case Study: Matt schedules the work of his repair shop. He takes appointments for his brake jobs and accepts "drive-in" business for tuneups and oil changes. He fills out work orders for all jobs and obtains the customer's signature before any work is done.

Text: Describing the Work
Scheduling the Work
Checking the Work

II. Responses to Individual Activities

1. Responses will vary. Students should describe how work orders and work schedules are used by the business owner they talk to. They should also indicate how these are different from the samples provided in the text. In discussing how to estimate a car repair job, the teacher might introduce students to one of the flat rate manuals available or review how they are used.

2. Various schedules are possible. Three hours should be allowed for brake jobs, and 1/2 hour for the oil/lube. One whole day should be left free since a total of only seven appointments were requested.

3.

QTY.	DESCRIPTION OF PARTS	COST	DESCRIPTION OF WORK	COST
1	Cap for brake cylinder* (old one leaking)		Brakes	$79.95*

CUSTOMER'S AGREEMENT:
I hereby authorize you to perform the above work and to use necessary materials. I agree to pay the amount estimated above. You and your employees may operate my car for inspection, testing, or delivery at my risk. You will not be responsible for loss or damage to car or articles left in it.

Customer's Signature:
X_____
WORK DONE BY: MLB*

TOTAL ESTIMATED COST $86.00

COMMENTS: Wheel alignment needs adjusting.*

TOTAL PARTS: _____
TOTAL LABOR: _____
TAX: _____
TOTAL COST: _____

*These items were filled in after the work was done. All the other parts were filled out before.

III. Responses to Discussion Questions

1. The work order is considered a legal document because both the customer and business owner make written promises to one another. The business owner promises to do the work described on the work order for a certain amount of money (or less). The customer allows the repair shop to drive the car if necessary, and promises to pay for the work listed on the form, etc.

This kind of written agreement is needed so that (1) the owner will be sure of getting paid for the job, and (2) the customer will know ahead of time approximately how much he or she will be charged for the job.

2. The estimator should figure out how much time a job will require and what parts and supplies will be needed. He or she must then multiply the labor time by the hourly labor charge, and must list prices for all parts. Several companies publish flat rate manuals which list the time usually needed for every kind of auto repair job. They also list the parts needed and the costs. These are very helpful in preparing estimates for customers. Titles include Motor's Mechanical Time and Parts Guide, Glenn's Flat Rate Manual, and Mitchell's Mechanical Parts/Labor Estimating Guide.

3. Many good car repair shops have a large number of customers. To make sure that there is not too much work in one day and too little in the next, many owners take appointments. Owners also can plan their workers' time better if they know in advance.

4. Many people distrust auto mechanics because they don't understand what is needed to repair a car and why all the costs listed on the work order are needed. Some people may have also had bad experiences with being overcharged (or at least thinking they were).

   Part of doing the work is keeping the customer happy. You should explain to Henry (and customers) ahead of time what you'll need to do to service his car. You should check the car after the repairs are made to be sure it really is fixed. Then you should explain again to the customer what you did and what all the costs are for. If you do good repair work for the amount you estimate beforehand, your customers will learn to trust you. Encouraging your customers to learn more about cars and teaching them a little each time you see them will also make them happier with your service.

5. Mo doesn't have a "quick serve" shop, so he doesn't have flat fees for certain jobs (which combine labor and parts charges) as Matt does. Most auto repair shops charge the way Mo does. He charges a certain number of dollars for each hour of labor ($30) and bills the customer for all parts and supplies he uses in the car. This is a more exact method of figuring out costs.

IV. Group Activity

This activity is designed to help students learn to schedule the work of an auto repair shop, to handle customers, and to complete work orders.

In interacting with the customers, the owner should be polite and informative. He or she should ask enough questions to get all the information needed to complete the work order. Students' work orders and work schedules should be based on the ones presented in the text and modified slightly to meet specific needs of their businesses. Students' estimates of costs should be based on their own experience in car repair, standard figures for shop time required, and cost of parts (from "flat rate manuals"), and sample work orders collected.

Unit 6 - Setting Prices (1 class period)

I. Case Study: Matt decides on the price for a disc/drum brake job based on the cost of parts, his operating expenses, and his desired profit. He also considers customer demand and the price of his competition.

Text: Two Ways of Pricing
Cost of Goods Sold
Operating Expenses
Profit
Competition
Customer Demand

II. Responses to Individual Activities

1. Parts and labor method
Flat rate method
Flat rate method
Parts and labor method

2. Cost of auto parts and supplies (cost of goods sold); operating expenses; profit; customer demand; and prices of the competition.

3. Students' responses depend on the information collected in the community. The better choice is the shop that offers the most services for the lowest price.

4. $$\text{Hourly Labor} = \frac{\text{Monthly Operating Expenses \& Profit}}{\text{Number of Hours Shop is Open in Month}} = \frac{\$6,000}{200} = \$30/\text{hr.}$$

III. Responses to Discussion Questions

1. Matt's lowest price for a disc/drum job was around $80 (cost of parts and operating expenses plus minimum profit). He could perhaps charge less if he reduced his profit a bit (although it is already very low). The highest price he could probably charge was $95--the price charged by a well-established competitor. Matt's ideal price was somewhere in the middle.

2. Matt probably made a good decision in setting his monthly profit goal so low. He knew that he needed to build up his customer base before he could start making money. Therefore, he planned to keep his profit low for the first year. Matt's prices, however, should be set in such a way that once he built up a good customer base he would begin making a healthy profit. If his prices were so low that he made little profit even when he had all the customers he could handle, his prices were probably too low.

3. Responses to the first question will depend on students' financial resources, lifestyle, and motivations. To live without a salary for a year, one would have to have a simple lifestyle, a large savings account, a working spouse, and/or many assets that could be liquidated (e.g. a home), etc. To speed up the generation of profits in a business, the owner would have to "start very small," with little equipment and facilities and yet (somehow) with strong customer drawing power; or for a more traditional-sized small business (with a shop and/or more employees), to develop a large customer base immediately. The latter could be done through purchasing a nationally known business name through a franchising company and/or through a very intensive pre-opening advertising campaign. These strategies, however, require substantial "up-front" money.

IV. Group Activity

This activity should give students further understanding of the process of and philosophy behind pricing in a car repair business. This activity will also help students to be more informed consumers of auto repair services.

Students first should calculate (or obtain) the hourly labor rate from several repair shops. They should then evaluate the businesses to determine possible explanations for differences in price observed. The range of repair services offered, the quality of mechanics, the "extras" offered such as free pick-up and delivery, and the shop's business image could all influence customer patronage of a certain shop. If more customers come to a shop, it may be possible to keep prices lower. Other factors that cause differences in price include differences in cost of materials (e.g., through a business owner's access to discount parts, differences in operating expenses (because of mechanics' wages, size and cost of building) and differences in owner's profit goals.

Unit 7 - Advertising and Selling (1 class period)

I. Case Study: Matt plans his advertising budget and selects the media he'll use. He decides on the Yellow Pages, direct mail fliers, the radio, and the newspaper. His sister designs a logo for his business. Matt, of course, hopes that his satisfied customers will refer their friends.

Text: How to Plan Your Advertising
What Media to Use
What to Say in Your Ads
How to Keep Your Customers Happy

II. Responses to Individual Activities

1. A good ad:
   - is simple;
   - attracts attention;
   - is imaginative;
   - is informative; and
   - makes people want to buy.

2. Possible answers include:
   - address and phone number of your shop;
   - services you offer;
   - other services you offer (credit, free pickup and delivery, free towing);
   - hours and days you are open;
   - special discounts; and
   - your business image (quick service, discount prices, personal treatment, etc.).

3. The parts of each ad should be labeled. Students' choice of the best ad should be based on factors listed in Individual Activity #1 (above).

4. Matt's ad should possess the qualities described in Individual Activity #1, the information listed in Individual Activity #2, and the five parts named in #3. It should stress Matt's business image--quick, specialized service and low everyday prices.

III. Responses to Discussion Questions

1. Possible Kinds of Repair Shops	Possible Business Image
• General repair shop	Good all-around service ("We can fix anything")

- Shops specializing in certain kinds of cars, for example:

low-priced foreign car	inexpensive repair for the economy-minded car owner
high-priced foreign car	quality repair and personalized service for the customer with "high-class" tastes

- Shops specializing in certain kinds of services, for example:

rebuilding engines	precision workmanship
installation of new mufflers	inexpensive and quick

- Shops offer "other" services, for example:

diagnostic service	thorough "detective" work using high quality equipment.

Logos and business names suggested should suit the business image of the repair shop and should describe the services offered.

2. Possible responses include:

Yellow Pages	Pros	Cons
	• long life span • reaches people who want to buy	• can't be changed easily • only reaches people who want to buy • all your competitors are listed too (hard to stand out)

Fliers (Direct Mail)	Pros	Cons
	• reaches just the people you want to reach • personal and highly successful at bringing in customers	• quite expensive

Newspaper	Pros	Cons
	• reaches large number of people	• has very short life span
	• easily changed	• more commonly used for retail stores
Radio		
	• immediacy of communication (audio)	• very short life span
		• frequent repetition needed
	• reaches people in their cars	

3. Possible responses include giving out free items such as booklets on auto maintenance, snow scrapers, bumper stickers, etc.; using beacons or skywriting; offering discounts and special coupons; sponsoring a bowling team; and teaching a class on do-it-yourself car repair at the local junior college.

4. Matt could compare the amount he was spending on advertising with averages for his industry (percent of revenues). He should, of course, spend more on his start-up advertising than on his later "maintenance" advertising. He also should see whether his advertising was bringing in customers. If his business was growing too fast or too slowly, he should modify his advertising accordingly. Matt could find out which media were most successful by asking his customers why they came in. He could also offer coupons or free offers in various media and compare customer response rates.

5. Car repair customers can be hard to please. Repairs are fairly costly, and people don't like to spend money. Many customers don't understand what they're getting and thus fail to appreciate good service. People are also inconvenienced by having to give up their car for repairs so they may be grumpy. The text presents some good principles of customer relations. Other ideas include: get to know your customers (be personal and friendly); stress quality service rather than economy prices (it's sometimes impossible to do good work if you have to keep the price low); don't take quite as many customers (so you can get the work done on time and relate to the customer); hire a service manager whose main job is to keep customers happy (your business would have to be fairly large to do this).

IV. Group Activity

This activity is designed to help students plan an advertising program (given a budget) and develop a printed ad.

1. Students should aim at developing a cost-effective advertising program reaching the largest number of customers at the lowest expense. Various responses are acceptable.

2. The business name and logo should be imaginative, and descriptive of the business. The ad should contain the five main parts and should have a catchy picture or headline and a simple, neat layout. Ad copy should be concise, informative, and persuasive.

Unit 8 - Keeping Financial Records (1 class period)

I. Case Study: Matt decides to operate on a cash-only basis and to use his work order as a sales slip. He takes in cash from several customers on a certain day and pays a few bills. He lists the money that came in and went out on his daily cash sheet.

Text: Cash or Credit?
The Work Order Form
Daily Cash Sheet

II. Responses to Individual Activities

1. To record the work you did (for your information and the customer's); to request payment from the customer; to record the money you took in from the customer; to prove that the customer has paid for the work.

2. Responses depend on the information collected by students. Students should find out whether credit is used and why or why not. They should explain clearly the similarities and differences between Matt's financial records and those of firms surveyed.

3.

Tuneup	$ 39.00
Brakes	79.95
TOTAL LABOR	$118.95
TAX (6%)	.90
TOTAL COST	$119.85

4.

QTY.	DESCRIPTION OF PARTS	COST	DESCRIPTION OF WORK	COST
1	Freeze Plug	$ 2.50	Replace left rear	
2	Coolant @ 7.98	$15.96	freeze plug	$52.50
3	Rad. products @ $2.95 (cleaner, protector, sealant)	$ 8.85	Flush radiator	7.50
			Total labor = 2 hrs.	@ $30/hr.
			TOTAL PARTS:	$27.31
			TOTAL LABOR:	60.00
			TAX (5%):	1.37
			TOTAL COST:	$88.68

5.

DAILY CASH SHEET			
Cash Receipts		Cash Payments	
Cash Sales	$274.23	Salaries	$
		Building Expenses	675.79
		Equipment and Furniture	
		Inventory or Supplies	59.17
		Advertising	200.00
		Other	
TOTAL CASH RECEIPTS	$274.23	TOTAL CASH PAYMENTS	$934.96

III. Responses to Discussion Questions

1. The work order used in an auto repair shop is a contract between the owner and the customer about what will be done and how much labor and parts will cost. A simple sales slip, such as the one used in a dress shop, is not detailed enough for the needs of an auto repair business. Room is also needed on the form for the customer's agreement.

2. A daily cash record will tell you what you've brought in every day (if you want to compare sales on different days). It will tell you what you've spent on a certain day. You can use this record to help balance your checkbook. You can use it to prepare monthly cash flow records (to see if you have enough cash in your business). You can use it to find out how much profit you've made.

3. Other records you may need to keep include:
   - business checkbook;
   - records of your business's unpaid bills (money you owe others);
   - records of parts and supplies ordered (e.g., purchase orders);
   - records of parts and supplies on hand (e.g., inventory card);
   - payroll records;
   - income tax records; and
   - sales tax records.

4. Giving credit is a way of attracting customers. It is easier for many people to write a check at the end of the month (or to spread their payment over several months). Allowing customers to charge is an extra service that keeps your customers happy. On the other hand, giving credit means more bookkeeping or expense for the business owner. If you use a major credit service, you have to pay them a fee. If you have your own credit plan, you must take time at the end of every month to send out bills. You also have the worry of handling unpaid customer bills. If too many customers fail to pay, you may not be able to pay your business expenses.

IV. Group Activity

The purpose of this activity is to give students practice in handling cash transactions for a certain day in the car repair shop. Students should describe each customer job and list the amount of money taken in for each job. They should also list some realistic business expenses an auto repair shop owner might have. Their cash sheets should accurately summarize all the activity of the day.

Unit 9 - Keeping Your Business Successful (1 class period)

I. Case Study: Matt examines his profit/loss statements after the first two years of business. He finds that his revenue dollars and profit dollars have increased. His profit ratio, on the other hand, has decreased. He decides to try to raise his profits next year by dropping his brake services, raising prices on tuneups, finding cheaper parts, and keeping his operating expenses as low as possible.

Text: Study Your Profit/Loss Statement
Keep Your Profits High
Change or Improve Your Services

II. Responses to Individual Activities

1. Revenues are the money coming into the business as a result of selling products or services.

   Cost of Goods Sold is the money spent on materials resold to the customer (auto parts, oil, brake fluid, etc.).

   Operating Expenses are the money going out of the business to cover other costs of keeping a repair shop open (for example, salaries and rent).

   Profit is "the reward for doing business," and is the amount left over after all the expenses of the business are paid.

2. Revenues coming from: brake jobs, tuneups, and oil/lube/filter jobs. Operating expenses such as: salaries, rent, utilities, advertising, office supplies, accountant and lawyer fees, payroll taxes.

3. a. Net profit = $12,750
      Expense ratio = 61%
      Profit ratio = 17%

   b. Year 2

   c. Year 2

   d. Year 1

4. a. Keep salaries as low as possible (keep Mechanic #2 on 3/4 time).

   b. Find a supplier who charges lower prices for parts.

   c. Raise prices on tuneups.

   d. Drop brake jobs (and do an even better job on his tuneups).

III. Responses to Discussion Questions

1. Matt could have added other repair services to attract customers (such as engine work and body work). He could have offered free towing, 24-hour emergency services, etc. (New and different services may require more expenses, however.)

2. Often you must spend more money to improve your business. Once your business is improved, you can earn far more money than you spent. For example, it may be that $2,000 extra in

advertising in a year may bring in 100 new customers (at $50/customer). You spent $2,000 and earned $5,000. Often an investment of several thousand dollars in repair equipment, renovations on your building, or extra training for your mechanics will bring in much more business than that. If you spend wisely, you may increase your sales.

3. a. Yes, it's good to plan ahead. If you set a profit goal, you have to set a revenue goal. If you have a revenue goal, you will have an idea of how many tuneups you need to sell and how many workers you need to have. This will help you plan your advertising and hiring activities. When you set goals, then you can more easily think of concrete steps to take to meet them.

   b. $150,000

   c. Probably not. His business grew by 39% between Years 1 and 2. It would be hard to double his business in one year (a growth of 100%).

   d. $30,000
   - 7,000
   $23,000 Matt would be better off with this salary because: (1) he would earn only $20,000 as an employee; (2) he has a business that could be sold for a certain amount of money; and (3) he has the satisfaction of creating a business "out of nothing." Disadvantages may include longer working hours and more managerial headaches (with customers, workers and budgets). Also, the business may fail.

IV. Group Activity

The purpose of this activity is to allow students an opportunity to evaluate the financial status of a business and to make plans to improve it. Planning and decisionmaking done by students in this exercise will be similar to the actions taken by a small business owner in "updating" a real business.

Students should explain whether they plan to raise prices (or lower them), increase the number of customers, and/or reduce expenses. They should describe how their revenues and various expenses will change in Year 3 (e.g., they'll raise salaries to present workers to get them to do a better job and keep customers). They should also describe how they plan to improve or change their services and why.

The entries under revenues, cost of goods sold, and expenses on the profit/loss statement should reflect the planned changes described in the narrative.

Students should also keep in mind that prices for the same item (e.g., utilities) will probably increase from Year 2 to Year 3 because of inflation. Students should compute their new net profit, cost of goods sold ratio, expense ratio, and profit ratio and show how their business is "healthier" in Year 3 than Year 2 (via a higher profit ratio).

Summary (15-30 minutes)

If desired, the quiz may be given prior to summarizing the module and doing wrap-up activities.

Emphasize major points of the module such as:

- Running an auto repair shop is a good small business opportunity for a person interested in auto mechanics and business, but it must be planned and located carefully for it to be successful.
- Previous auto mechanic and business experience or training, organizational ability, and a genuine liking of people are helpful qualities for an auto repair shop owner to have.
- Hiring and keeping top quality staff is a key part of running the business well.
- Keeping the customers satisfied with your service is also vitally important.
- Knowing how to analyze business trends, customer demand, and competition is important. The repair shop owner should stay alert to changes in these areas and modify his or her business as needed to stay successful.

Remind students that their participation in this module was intended as an awareness activity so they could consider entrepreneurship as a career option. Their introduction to the skills required for successful small business management has been brief. They should not feel that they are now prepared to go out, obtain a loan, and begin their own business. More training and experience are necessary. You can suggest at least three ways of obtaining that experience: one way is to work in the business area in which they would eventually want to have their own venture; another is to go to school (community colleges are starting to offer AA degrees in entrepreneurship).

This would be a good time to get feedback from the students as to how they would rate their experience with the module. Could they identify with the characters portrayed in the case studies? How do they feel about the learning activities?

If possible, use a final wrap-up activity to help students apply what they have learned in the module. Possible ideas include the following:

- Have students discuss or write about how they see themselves owning an auto repair shop now that they know more about it. What further training and experience would they need before starting this kind of business?
- Use one or more of the group activities that were not done earlier. Feel free to combine, expand, and adapt the activities

so that students can consider a more complete picture of running this kind of business.

Quiz (30 minutes)

The Quiz may be used as an assessment instrument or as an optional study tool for students. If you wish to use the quiz for study purposes, duplicate and distribute the answer key to students. In this case, student achievement may be assessed by evaluating the quality of the students' participation in module activities.

Quiz Answer Key

1. Services; cars

2. Possible responses include:
   - free pickup and delivery of customers' cars;
   - loaner cars;
   - free estimates;
   - free diagnostic checks;
   - one-day service;
   - 24-hour emergency service;
   - special guarantees on your work; or
   - credit.

3. Possible responses include:
   - interest and ability in car repair;
   - ability to get along with workers and customers;
   - have good business sense (plus training or experience);
   - willingness and ability to work hard; or
   - willingness and ability to keep up-to-date on auto repair developments.

4. c

5. b

6. b

7. d

8. Possible responses include: training and/or experience in car repair; dependability (will come to work on time and will finish what is started); eagerness to learn; or ability to work well with people.

9. c

10. Possible responses include: initial orientation to shop and procedures; initial training on unfamiliar jobs; or continuing education on new aspects of car repair.

11. Possible responses include: information about the customer and the car; description of the work; comments; description of parts; total estimated cost; total actual cost; or customer's agreement.

12. c

13. Cost of auto parts and supplies; operating expenses; profit; prices of competition; what customers are willing to pay.

14. Owner's salary, income tax, expansion of the business (new equipment, renovations, etc.)

15. b

16. a

17. Possible responses include: build up a good reputation; have good mechanics and equipment and fair prices; communicate with customers, keep good records; handle problems as soon as possible.

18. Total estimated cost; total parts; total labor; total parts and labor; tax; total cost.

19. Possible responses include: salaries, payroll taxes, rent, utilities, advertising, office supplies, or other expenses (e.g., accountant and legal fees).

20. a

21. Bring in more customers; raise prices; reduce (or control) costs (operating expenses and cost of goods sold).

22. Improve services; add services; drop services.

SUGGESTED READINGS

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GOALS AND OBJECTIVES

Goal 1: To help you plan your auto repair shop.

Objective 1: Describe the services, customers, and competition of an auto repair shop.

Objective 2: List three personal qualities a car repair shop owner might have.

Objective 3: List three ways to help your business compete successfully.

Objective 4: List one legal requirement for running this business.

Goal 2: To help you choose a location for your business.

Objective 1: List several things to think about in picking an area and a building for your business.

Objective 2: Pick the best location for an auto repair shop from three choices.

Goal 3: To help you plan how to get money to start your business.

Objective 1: Write a business description for your auto repair shop.

Objective 2: Given starting expenses for your auto repair shop and your money on hand, complete a statement of financial need.

Goal 4: To help you plan how to hire and train workers.

Objective 1: Decide how to divide the work of your auto repair shop among several employees.

Objective 2: Pick the best person for a mechanic job in your shop.

Objective 3: List three kinds of training your mechanics should receive.

Goal 5: To help you organize the work of your auto repair shop.

Objective 1: Fill out a customer work order for a particular repair job.

Objective 2: Fill out a weekly appointment schedule for your customer jobs.

Goal 6: To help you decide on the right prices to charge for your auto repair shop.

Objective 1: Pick a good "flat rate" to charge for a specific "quick service" repair job.

Objective 2: Pick a good price to charge for labor for general car repair jobs.

Goal 7: To help you advertise and sell the services of your auto repair shop.

Objective 1: Choose the one way to advertise your business.

Objective 2: Develop a printed ad for your shop.

Objective 3: List several ways of keeping your customers happy.

Goal 8: To help you learn how to keep financial records for your auto repair shop.

Objective 1: On a work order, fill out costs for a car repair job.

Objective 2: Fill out a cash sheet for a certain business day.

Goal 9: To help you learn how to stay successful.

Objective 1: From a profit/loss statement for an auto repair shop, figure out the net profit, expense ratio, and profit ratio.

Objective 2: State one way of increasing profits in an auto repair shop.

Objective 3: State one way of changing your services to raise your revenues.

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